

# Safety Light Array

## Body Protection

# SEFB612

Part Number



- Increased safety thanks to intelligent muting functions
- Multifunctional thanks to measuring function
- Simple configuration and diagnosis with wTeach2 software

The safety light array can be attached anywhere thanks to the T nut and mounting bracket. The visible red light and signal strength display make it easy to align the emitter and the receiver. Safety mode, restart prevention, and contactor monitoring are included as standard functions. The user-friendly IO-Link and wenglor software wTeach2 are used for configuration. In addition, safety light arrays provide various muting features for transporting material through hazardous areas. Optional LED indicators visualize the various muting phases.



## Technical Data

Optical Data	
Range	0,5...50 m
Beam Distance	500 mm
Number of Beams	2
Light Source	Red Light
Max. Ambient Light	10000 Lux
Opening Angle	± 2,5 °

Electrical Data	
Sensor Type	Receiver
Supply Voltage	19,2...28,8 V DC
Current Consumption (U <sub>b</sub> = 24 V)	≤ 350 mA
Response Time	15 ms
Temperature Range	-30...55 °C
Storage temperature	-30...70 °C
No. Safety Outputs (OSSDs)	2
Safety Output Voltage Drop	≤ 2,3 V
PNP Safety Output/Switching Current	≤ 300 mA
Number of Signal Outputs	1
Signal Output Voltage Drop	≤ 2,5 V
Signal Output/Switching Current	≤ 100 mA
Short Circuit and Overload Protection	yes
Reverse Polarity Protection	yes
Interface	IO-Link V1.1
Protection Class	III

Mechanical Data	
Housing Material	Aluminum
Disc Material	Polycarbonate
Degree of Protection	IP65/IP67
Connection	M12 × 1

Safety-relevant Data	
ESPE Type (EN 61496)	4
Performance Level (EN ISO 13849-1)	Cat. 4 PL e
Mission Time TM (EN ISO 13849-1)	20 a
Safety Integrity Level (EN 61508)	SIL3
Safety Integrity Level (EN 62061)	SILCL3

Function	
Body Protection	yes
Scope of Functions	Muting

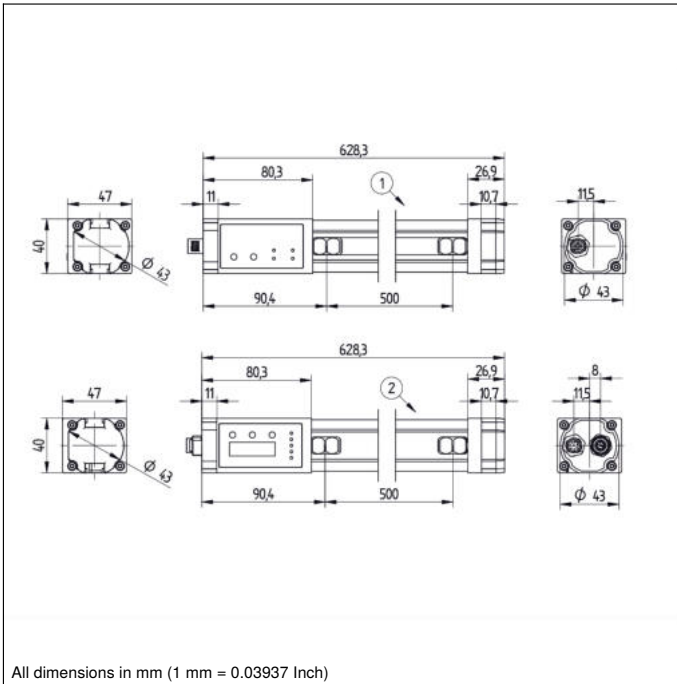
IO-Link	●
Connection Diagram No.	1029   1030
Control Panel No.	A39
Suitable Connection Equipment No.	89
Suitable Mounting Technology No.	860   870   880

## Suitable Emitter

SEFB512
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## Complementary Products

Connection Box for Muting Sensors
IO-Link Master
Muting Sensor Set
Path-Folding Mirror Z2UG001
Protection Column with Path-Folding Mirror SZ000EU125NN01
Protection Column with Protective Screen Z2SS001
Safety Relay SG4-00VA000R2, SR4B3B01S, SR4D3B01S
Software

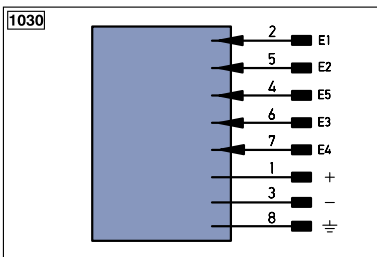
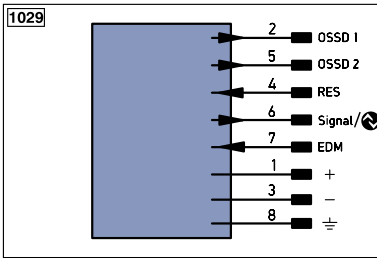


All dimensions in mm (1 mm = 0.03937 Inch)

### Ctrl. Panel



- 03 = Error Indicator
- 20 = Enter Button
- 22 = UP Button
- 23 = Down Button
- 52 = OSSD ON
- 53 = OSSD OFF
- 60 = Display
- 82 = Acknowledgement Request
- 9a = Weak signal



#### Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN <sup>A/RS422</sup>	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sup>B/RS422</sup>	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sup>A</sup>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sup>B</sup>	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A <sub>MIN</sub>	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A <sub>MAX</sub>	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	A <sub>OK</sub>	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY <sub>in</sub>	Synchronization In
T	Teach Input	BZ	Block Discharge	SY <sub>OUT</sub>	Synchronization OUT
Z	Time Delay (activation)	AWV	Valve Output	OL <sub>T</sub>	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to IEC 60757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	⊕	Grounding	OG	Orange
IO-Link	IO-Link	S <sub>nR</sub>	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	L <sub>a</sub>	Emitted Light disengageable	GY	Grey
Bl_D <sup>+/</sup>	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sup>0/RS422</sup>	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

